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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,192	06/30/2003	Jason S. Katcha	GEMS8081.173	1191
27061	7590	04/08/2005	EXAMINER	
ZIOLKOWSKI PATENT SOLUTIONS GROUP, SC (GEMS)			HO, ALLEN C	
14135 NORTH CEDARBURG ROAD			ART UNIT	
MEQUON, WI 53097			PAPER NUMBER	
			2882	

DATE MAILED: 04/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/604,192

Applicant(s)

KATCHA ET AL.

Examiner

Allen C. Ho

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**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --****Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 07 February 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,3-12 and 14-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1 and 3-7 is/are allowed.
- 6) ☒ Claim(s) 8-10,14,18,19 and 21-24 is/are rejected.
- 7) ☒ Claim(s) 11,12,15-17 and 20 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 June 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)    | Paper No(s)/Mail Date. _____  |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 8-10, 14, 18, 19, and 21-24 are rejected under 35 U.S.C. 102(b) as being anticipated by Yamada *et al.* (U. S. Patent No. 4,969,171).

With regard to claims 8-10, Yamada *et al.* disclosed a CT imager comprising: a rotatable gantry having an imaging bore disposed therethrough, and a stationary base supporting the gantry; a slip ring (6) disposed in the rotatable gantry and electrically connected to an x-ray tube (9) and an HV tank (7, 8); and a power conditioner (3) external to the gantry to receive a DC voltage and generate an AC voltage waveform that is applied to the HV tank through the slip ring, the power conditioner having an inverter (3) connected to a series-resonant circuit (2) that is connected (through the inverter) to the slip ring.

With regard to claim 14, Yamada *et al.* disclosed the CT imager of claim 8, wherein the at least one resonant circuit is configured to limit frequency content of current and voltage waveforms on the slip ring (it is a frequency band-pass filter).

With regard to claims 18 and 21-24, Yamada *et al.* disclosed a CT scanner comprising: a rotatable x-ray tube (9) and a rotatable HV tank (7, 8); a slip ring (6) to transfer current to the HV tank; a stationary base having an inverter (3) to supply AC power to the slip ring for

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transference to the HV tank; and the inverter having at least one resonant circuit (2, an LC circuit) connected (through the inverter) to the slip ring.

With regard to claim 19, Yamada *et al.* disclosed the CT scanner of claim 18, further comprising a transformer (71, 81) connected to the at least one resonant circuit and the slip ring.

### ***Allowable Subject Matter***

3. Claims 1 and 3-7 are allowed.
4. Claims 11, 12, 15-17, and 20 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.
5. The following is a statement of reasons for the indication of allowable subject matter:

With regard to claims 1 and 3-7, although the prior art discloses x-ray generators for a CT scanner comprising a slip ring to transfer power to a rotating high voltage (HV) tank, and the prior art (Steigerwald *et al.*) discloses an x-ray generator for a CT scanner comprising a stationary inverter having an H-bridge configuration, the configuration having a pair of outputs such that at least one output is connected to a resonant circuit, it fails to teach or fairly suggest an x-ray generator for a CT scanner as claimed.

### ***Response to Arguments***

6. Applicant's arguments filed 07 February 2005 with respect to claims 1, 3-12, and 14-24 have been fully considered and are persuasive. The rejections of claims 1, 3-12, and 14-24 under

35 U.S.C. 102 (b) and/or 103(a) in view of Tanaka (U. S. Patent No. 4,995,069) have been withdrawn.

7. Applicant's arguments filed 07 February 2005 have been fully considered but they are not persuasive.

The applicants argue Yamada *et al.* failed to disclose an inverter having at least one resonant circuit connected to the slip ring. In particular, the applicants contend that the resonant circuit of the inverter, not simply an inverter output, is connected to the slip ring. The examiner respectfully disagrees with this assertion. The examiner would like to point out that the claims do not claim how the resonant circuit is connected to the slip ring. Specifically, Yamada *et al.* disclosed a resonant circuit that is connected to the slip ring through the inverter. Thus, the resonant circuit is connected to the slip ring. In other words, all elements in the circuit are connected to each other.

### ***Conclusion***

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Allen C. Ho whose telephone number is (571) 272-2491. The examiner can normally be reached on Monday - Friday from 8:00 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Edward J. Glick can be reached at (571) 272-2490. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Allen C. Ho  
Primary Examiner  
Art Unit 2882

05 April 2005